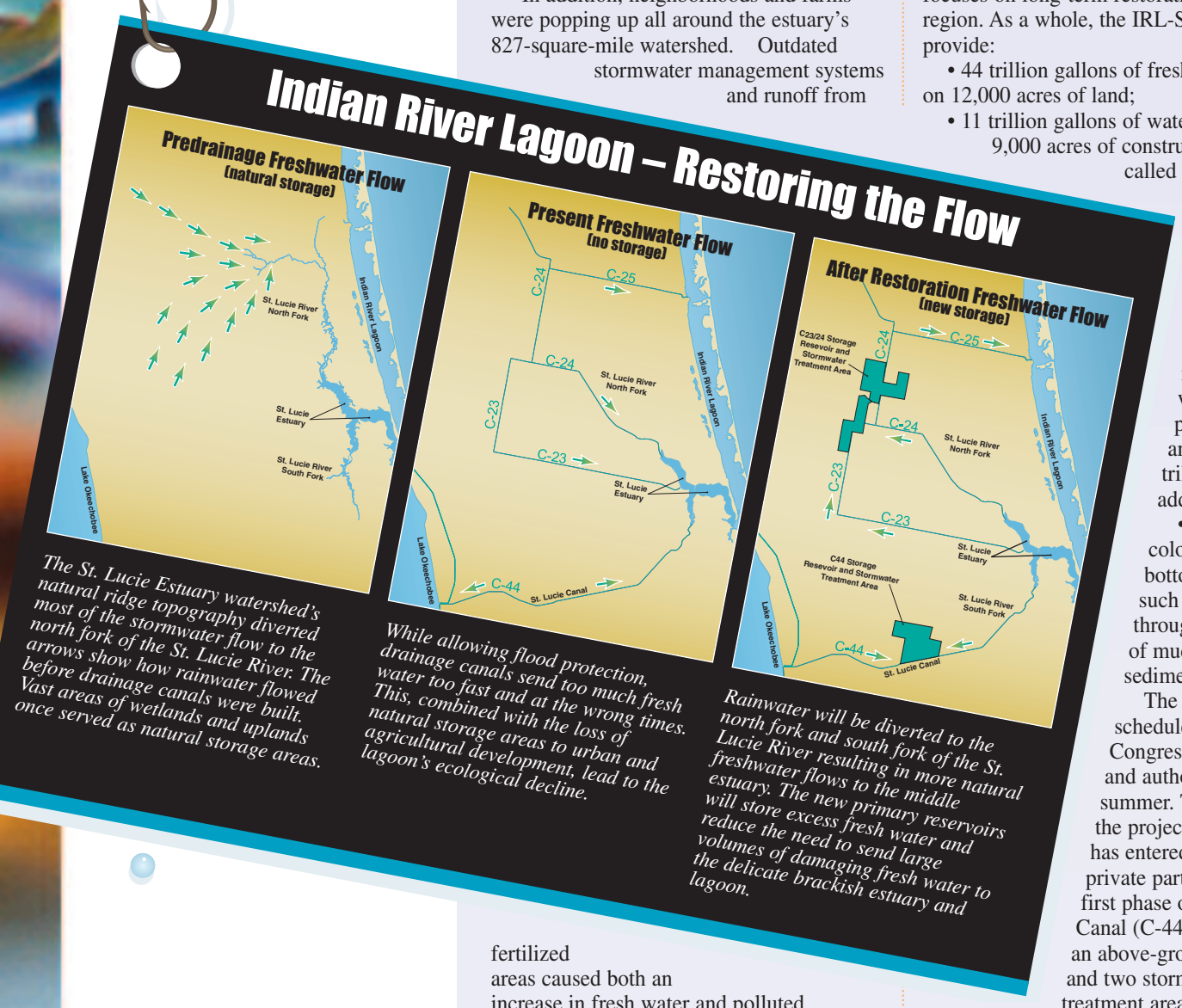
continued from front

water releases to the estuary from Lake Okeechobee. These freshwater releases, combined with excess stormwater runoff arriving in the estuary via canals, altered saltwater levels, stressing the estuary's unique ecosystem.

In addition, neighborhoods and farms were popping up all around the estuary's 827-square-mile watershed. Outdated stormwater management systems and runoff from fertilized areas caused both an increase in fresh water and polluted water entering the estuary and lagoon.

Whether from Lake Okeechobee and canals, or surrounding urban and agriculture areas, water heading to these water bodies needs to be diverted, treated or stored. Efforts to do this are under way both regionally and locally.



The St. Lucie Estuary watershed's natural ridge topography diverted most of the stormwater flow to the north fork of the St. Lucie River. The arrows show how rainwater flowed before drainage canals were built. Vast areas of wetlands and uplands once served as natural storage areas.

While allowing flood protection, drainage canals send too much fresh water too fast and at the wrong times. This, combined with the loss of natural storage areas to urban and agricultural development, lead to the lagoon's ecological decline.

Rainwater will be diverted to the north fork and south fork of the St. Lucie River resulting in more natural freshwater flows to the middle estuary. The new primary reservoirs will store excess fresh water and reduce the need to send large volumes of damaging fresh water to the delicate brackish estuary and lagoon.

State/Federal solutions

The Indian River Lagoon South Project, a joint initiative between the South Florida Water Management District and U.S. Army Corps of Engineers as part of the Comprehensive Everglades Restoration Plan, focuses on long-term restoration goals of the region. As a whole, the IRL-S Project will provide:

- 44 trillion gallons of fresh water stored on 12,000 acres of land;
- 11 trillion gallons of water treated in 9,000 acres of constructed wetlands called stormwater treatment areas;
- 90,000 acres of natural areas, including 53,000 acres of restored wetlands while providing another 9.7 trillion gallons of additional storage.
- the re-colonization of bottom-dwellers such as oysters through the removal of muck and sediment.

The project plan is scheduled to go to Congress for review and authorization this summer. To accelerate the project, the District has entered into a public-private partnership for the first phase of the St. Lucie Canal (C-44) component, an above-ground reservoir and two stormwater treatment areas.

"We have the capabilities to construct a reservoir or stormwater treatment area in a large area and make a difference in how water is managed regionally," said South Florida Water Management District Project Manager David Unsell, "but that will solve only half of the problem."

Local solutions

While the IRL-S project works to achieve more comprehensive regional ecosystem restoration goals, local efforts address the other half of the restoration equation – the quality of water entering the estuary and lagoon from agricultural and urban areas.

In 1998, the interagency South Florida Ecosystem Restoration Task Force formed a St. Lucie River Issues Team made up of federal, state and local governments as well as agricultural and environmental interests. The team was tasked with documenting the existing condition of the estuary, describing the impacts of the 1998 releases from Lake Okeechobee and developing an interim action plan made up of specific short-term projects that can be implemented within five years to improve the estuary's water quality.

The way the water is treated and managed locally has a large effect on the health of the estuary and lagoon. Funding from the Issues Team allows local governments to take the necessary steps to improve the quality of water discharges.

"The Issues Team allows local government to perform neighborhood-specific projects that may have been put on the back burner of their capital improvement program," said Kathy LaMartina, program manager of the Issues Team.

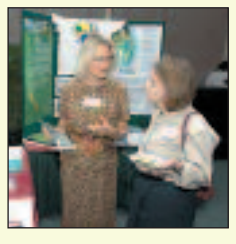
To date, the Issues Team has funded 96 projects totaling more than $57 million including local sponsors' 50 percent cost match. Stormwater retrofits comprise almost half of the projects funded by the team. Agricultural and urban best management practices, habitat restoration, and research and education are the other main categories.

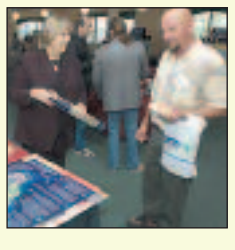
Many of the turn-dirt projects have been successfully completed. Funding has been through the Florida Legislature and, most recently, $2 million from the South Florida Water Management District for projects starting in 2004.

Reaping the benefits

The steadfast commitment and support of all levels of government working together with local communities has been instrumental in the forward progress to date and is vital to continued momentum in the future.

An avid local supporter of the restoration and protection efforts, Martin County Commissioner Sarah Heard explains it this way: "It is not about water supply and drainage for special interest. It's not simply about building more dams and canals to redirect the dirty water. It's about fixing the Central and South Florida Flood Control Project to improve the quality of the environment and to restore, preserve and protect the South Florida ecosystem."





WATERSHED in Transition 2004

Stakeholders coordinate efforts, share common goals

Nearly 300 federal, state and local leaders, scientists, residents, students and stakeholders came together in early January for the three-day St. Lucie Estuary and Indian River Lagoon "Watershed in Transition 2004" Symposium in Stuart. The panelists focused on the successful efforts being incorporated now into a retrofit of the entire watershed, while helping stakeholders recognize the long-term goals and time frame for accomplishing them. The forum was funded in part by the St. Lucie River Issues Team, and co-sponsored by the South Florida Water Management District and Florida Department of Environmental Protection.